

Montana Content Standards Change Log

Standards	Grade Level
<p>Standard 1-Students demonstrate an understanding of the basic operations of technologies.</p> <p>1. Develop basic skills and procedures needed to operate various technologies. [HE - 4.4.4; 5.4.2]. WP - 1.4.1 2. Communicate using appropriate terminology and symbols related to simple care and maintenance of various technologies. [RE - 2.4.6]. [SL - 3.4.3]. WP - 5.4.3; 5.4.4</p>	

Content Standards Part for Technology

Grade 4

Grade 8

procedures needed to operate various
[2]. **WP - [1.4.3]; 5.4.1; 5.4.3; 5.4.5.**
appropriate terminology and demonstrate
f various technology tools.
- 5.4.3; 5.4.5

1. Use and refine skills and procedures needed to operate various technologies. **HE - 5.8.6. WP - [3.8.2]; 3.8.4; 5.8.1.**
2. Develop competence with basic system and tool set-up, technical terminology, and basic care and maintenance. **RE - 2.8.6. WP - 5.8.1; 5.8.5.**
3. Develop troubleshooting strategies to solve operations problems (e.g., lost

Skills Integration Technology

Upon Graduation

1. Use and enhance an established repertoire of skills and procedures as needed to operate various technologies. [HE - 1.12.3; 2.12.1; 3.12.1; 3.12.3; 5.12.6]. **SC - 1.12.1.** **WP - [3.12.1]; 3.12.2; 3.12.4; 4.12.3; 5.12.1; 5.12.2.**
2. Demonstrate competence with basic system and tool set-up, technical terminology, basic care and maintenance.

Technology

understanding of the basic operations of technologies.

- technologies. [HE - 4.4.4; 5.4.2]. WP - [1]
2. Communicate using appropriate termin simple care and maintenance of various tec [RE - 2.4.6]. [SL - 3.4.3]. WP - 5.4.3; 5.4
3. Identify and solve simple operating pro 5.4.5.

Standard 2-Students use a variety of technologies to enhance productivity.

1. Develop skills to enhance performance (e.g., word processing, calculating, graphing). [MA - 1.4.1; 6.4.1; 6.4.2]. SC - 1.4.1; 5.4.1]. WL - 3.I.3; 3.I.4. WR - 1.4.1; 2.4.1; 2.4.2; 2.4.3; 2.4.4; 2.4.5. [HE - 5.4.4]. ML - 3.4.1. SC - 1.4.3; [3.4.1; 3.4.2]. WR - 2.4.1; 2.4.2; 2.4.3; 2.4.4; 2.4.5.
2. Develop and present a project using tec WR - 2.4.1; 2.4.2; 2.4.3; 2.4.4; 2.4.5. [HE - 5.4.4]. ML - 3.4.1. SC - 1.4.3; [3.4.1; 3.4.2]. WR - 2.4.1; 2.4.2; 2.4.3; 2.4.4; 2.4.5.
3. Choose appropriate technology for a task (VA). [HE - 4.4.4]. MA - 1.4.5; [5.4.4].

Standard 3-Students use a variety of technologies for communication.

1. Use multiple communication technologies for various purposes. AR - 3.4.1; 4.4.1; 4.4.2; [5.4.2; 5.4.3; 5.4.4]. SC - 1.4.5; [1.4.6; 2.4.1; 2.4.2; 2.4.3; 2.4.4]. WP - [3.4.1]; 5.4.1. [WL - 1.I.1; 1.I.4; 1.I.5; 1.I.6].
2. Explore online telecommunications tools. WP - [3.4.1; 3.4.4]; 5.4.1; [5.4.3].

Standard 4-Students use technology responsibly and understand its impact on individuals and society.

1. Safely use various technologies (e.g., Internet, mobile devices, software). HE - 5.4.2. LM - 2.4.4. SS - 2.4.7.
2. Describe ethical technology use (e.g., fair use of technology). LM - 2.4.4. ML - 4.4.1. WP - 5.4.4.
3. Identify some impacts of technology on individuals and society. [SC - 5.4.1; 5.4.4; 6.4.1; 6.4.2]. SS - 2.4.7.

<p>2]. WP - [1.4.5]; 5.4.1; 5.4.3; 5.4.5. riate terminology and demonstrate f various technology tools. - 5.4.3; 5.4.5 erating problems. WP - 5.4.1; 5.4.3;</p>	<p>gues. HE - 5.8.6. WP - [5.8.2]; 5.8.4; 5.8.1. 2. Develop competence with basic system and tool set-up, technical termino- logy, and basic care and maintenance. RE - 2.8.6. WP - 5.8.1; 5.8.5. 3. Develop troubleshooting strategies to solve operations problems (e.g., lost files, equipment failures). WP - [1.8.3]; 5.8.5.</p>
<p>erformance and ease task completion ing, graphing, imaging). [HE - 4.4.4; 2]. SC - 1.4.2; [3.4.3]. [WP - 3.4.3; - 1.4.1; 2.4.1; 2.4.2; 2.4.3; 2.4.4; 2.4.5. ct using technology. AR - 3.4.1. 2.4.5. 1.4.3; [3.4.3]. [WL - 2.I.2; 2.I.3]. ogy for a task. AR - 3.4.1; [3.4.4. 5; [5.4.4]. [ML - 3.4.2]. SC - 1.4.2.</p>	<p>1. Refine skills to enhance performance and ease task completion (e.g., programming, authoring, editing). [MA - 6.8.1; 6.8.2]. WP - 5.8.1; [5.8.2]. WL - [2.II.2]; 3.II.3. WR - 1.8.1; 1.8.2; 1.8.3; 1.8.4; 2.8.1; 2.8.2; 2.8.3; 2.8.4. 2. Apply technology in designing, developing and presenting a project. AR - [2.8.2 (VA)]; 3.8.1. [HE - 4.8.4]. MA - 1.8.5; [6.8.1; 6.8.2]. ML - 3.8.1. SC - 1.8.2. WP - [3.8.3]; 5.8.1; 5.8.2. WR - 2.8.1; 2.8.3; 2.8.4. 3. Compare technologies and select the best one for a task. MA - 1.8.5. [ML - 3.8.2]. SC - 1.8.2. WP - 3.8.3; 5.8.3; 5.8.1.</p>
<p>n technologies to fulfill a variety of 4.2; [5.4.2; 5.4.5]. MA - 1.4.5. [1.4.6; 2.4.3; 2.4.4; 3.4.4; 4.4.2]. 1; 1.I.4; 1.I.5; 3.I.1; 3. I. 2; 3. I. 4]. ications tools. [SC - 1.4.6; 5.4.2]. 3].</p>	<p>1. Identify and use telecommunications tools to exchange ideas and information with others (e.g., geographic information, system map, web page). [AR - 4.8.4; 5.8.1; 5.8.2; 5.8.4; 6.8.1]. RE - 4.8.3; 4.8.7. SC - [1.8.3; 3.8.2]; 1.8.5; [2.8.2; 2.8.3; 2.8.4; 4.8.1; 4.8.3]. [WL - 1III.1; 3.II.2; 3.II.3; 3.II.4; 4.II.1; 4.II.3; 9.III.1]. WP - [3.8.1; 3.8.3; 3.8.4]; 5.8.1; [5.8.3]. 2. Identify and use telecommunications tools to participate in online projects. [HE - 1.8.3]. SC - 5.8.2. WP - [3.8.1]; 3.8.3; [3.8.4]; 5.8.1. WL - 9.II.2; [9.II.3].</p>
<p>gies (e.g., Internet, software, comput- SS - 2.4.7. WP - [5.4.1]; 5.4.5. use (e.g., fair use, ownership). 5.4.4. chnology on people. [LM - 2.4.4]. . SS - 2.4.7; 5.4.6.</p>	<p>1. Safely use various technologies (e.g., e-mail, chat software, tools). [LM - 2.8.3]. WP - 5.8.4. 2. Develop a personal code of standards for ethical technology use (e.g., privacy, copyright, etiquette). LM - 2.8.2. ML - 4.8.1. WP - 5.8.4. 3. Explore the present and future impacts of technology on people and the environment. [AR - 6.8.4]. [LM - 2.8.3]. SC - 6.8.2. SS - 2.8.7; 5.8.6. WP - 5.8.4.</p>

- needed to operate various technologies. [HE - 1.12.5; 2.12.1; 3.12.1; 3.12.5; 5.12.6]. **SC - 1.12.1.** **WP - [3.12.1]; 3.12.2; 3.12.4; 4.12.3; 5.12.1; 5.12.2.**
2. Demonstrate competence with basic system and tool set-up, technical terminology, basic care and maintenance.
 3. Use and refine troubleshooting strategies to solve technical operations problems. **WP - 5.12.5.**

- 3.2].
- 8.4.
- forma-
- 8.2];
- ; projects.
- ;
- the
1. Apply sophisticated skills and strategies to enhance performance and ease task completion. **MA - 1.12.1.** **SC - 1.12.2; 3.12.1.** **WP - 3.12.2; [3.12.3; 3.12.4]; 5.12.1; 5.12.2.** **WL - 3.III.3.** **WR - 2.12.1; 2.12.2; 2.12.3; 2.12.4; 2.12.5.**
 2. Integrate technology in designing, developing, presenting and managing projects. **AR - [2.12.2; (VA)]; 3.12.1.** [HE - 1.12.3; 3.12.2; 4.12.3; 4.12.4; 5.12.5]. **MA - 6.12.5.** **ML - 3.12.1.** **SC - 1.12.2; 3.12.1; 4.12.3.** **WR - 2.12.1; 2.12.2; 2.12.3; 2.12.4; 2.12.5.**
 3. Analyze and evaluate a variety of technologies and match the best technology to a task. **MA - 1.12.5.; 7.12.5.** **ML - 3.12.2.** **SC - 3.12.1; 4.12.3.** **WP - 3.12.1; 3.12.2; [3.12.3; 4.12.3]; 5.12.1.**

1. Select and apply telecommunications tools to exchange ideas and information (e.g., geographic information system map, multi-media presentation, web page). **[AR - 4.12.2; 5.12.1; 5.12.2; 5.12.6; 6.12.1].** **RE - 4.12.4; 4.12.7.** **SC - [2.12.2]; 3.12.1; [3.12.2; 3.12.3]; 4.12.3; [5.12.2].** **WP - 3.12.4; [5.12.2; 5.12.5].** **[WL - 3.III.2; 3.III.4; 7.III.1; 7.III.3; 7.III.4; 8.III.1].**
2. Use telecommunications tools to participate in collaborative online projects. **[AR - 1.12.4].** **[SC - 3.12.1].** **WP - 3.12.4.** **[WL - 1.III.4]; 9.III.3.**

1. Safely use various technologies (e.g., robotics, workplace tools). **[LM - 2.12.3].** **WP - 4.12.3; 5.12.4.**
2. Model and exemplify a high standard of ethics for the uses of technology (e.g., privacy, intellectual property). **LM - 2.12.2.** **ML - 4.12.1.** **[SC - 5.12.3].** **WP - 4.12.3; 5.12.4.**
3. Evaluate the present and future impacts of technology on society, economy and the environment. **[AR - 6.12.4].** **[LM - 2.12.3].** **SC - [5.12.1]; 5.12.3; 6.12.1; 6.12.2.** **SS - 2.12.7; 5.12.6.** **WP - [4.12.1]; 4.12.3; [5.12.4].**

<p>Standard 5-Students develop the skills, knowledge and abilities to apply a variety of technologies to conduct research, manage information, and solve problems.</p>	<ol style="list-style-type: none"> Ask a question and use technology to find answers. [AR - 5.4.2; 6.4.1; 6.4.2; 6.4.3]. HE - [5.4.1]; 5.4.2; 5.4.3. [MA - 1.4.5]. RE - 4.4.2. [SC - 2.4.6; 3.4.1]. [WP - 5.4.3]. WL - [2.I. 1]; 4.I.1; [4.I.3; 5.I.1]. Use various technologies to identify sources of information. [AR - 4.4.3; 5.4.6]. HE - [1.4.2; 1.4.3; 1.4.4; 1.4.5; 1.4.6]. LM - 1.4.3; 4.4.2. [ML - 4.4.2]. [SC - 1.4.1]. [SS - 1.4.1; 1.4.2]. WP - 5.4.1; 5.4.2; 5.4.3. [VA - 1.4.1]. 6.I.1; 6.I.2; 7.I.1; 7.I.2; 7.I.3; 7.I.4]. 9.I.2; 9.I.3. Identify information from technical sources and evaluate the validity of findings. [AR - 5.4.5]. [HE - 1.4.2]. LM - 1.4.3; 1.4.4; 1.4.5; 1.4.6. [SC - 4.4.1; 4.4.5; 4.4.6]. [WP - 5.4.1]. [VA - 1.4.1]. HE - [1.4.2; 1.4.3; 1.4.4; 1.4.5; 1.4.6].
<p>Standard 6-Students apply technological abilities and knowledge to construct new personal understanding.</p>	<ol style="list-style-type: none"> Apply existing information to develop original work. [AR - 5.4.2; 6.4.1]. [HE - 1.4.4; 1.4.5; 1.4.6]. [MA - 1.4.5]. RE - 1.4.2. WP - 5.4.1. [WL - 4.I.3; 6.I.1]. [VA - 1.4.1]. LM - 4.4.1; 4.4.2; 4.4.3. ML - 3.4.1. [RE - 1.4.2]. [SC - 1.4.1; 1.4.2]. [WP - 5.4.1]. WR - 6.4.3. Create original work using various technologies. [AR - 5.4.2; 6.4.1]. [HE - 1.4.4; 1.4.5; 1.4.6]. [MA - 1.4.5]. RE - 1.4.2. WP - 5.4.1. [WL - 4.I.3; 6.I.1]. [VA - 1.4.1]. LM - 4.4.1; 4.4.2; 4.4.3. ML - 3.4.1. [RE - 1.4.2]. [SC - 1.4.1; 1.4.2]. [WP - 5.4.1]. WR - 6.4.3. Apply a variety of technologies to investigate a content area. [HE - 1.4.2; 1.4.3; 1.4.4; 1.4.5; 1.4.6]. [MA - 1.4.5]. RE - 1.4.2. WP - 5.4.1. [WL - 4.I.3; 6.I.1]. [VA - 1.4.1]. LM - 4.4.1; 4.4.2; 4.4.3. ML - 3.4.1. [RE - 1.4.2]. [SC - 1.4.1; 1.4.2]. [WP - 5.4.1]. WR - 6.4.3. Apply personal understanding and technological skills to solve a problem. [AR - 5.4.6]. [HE - 1.4.3; 1.4.4; 1.4.5; 1.4.6]. [MA - 1.4.5]. RE - 4.4.2. [SC - 3.4.5; 5.4.3]. [WP - 5.4.1]. [VA - 1.4.1]. LM - 4.4.1; 4.4.2; 4.4.3. ML - 3.4.1. [RE - 1.4.2]. [SC - 1.4.1; 1.4.2]. [WP - 5.4.1]. WR - 6.4.3.

<p>nology to find answers. [AR - 4.4.1; [5.4.1]; 5.4.2. LM - 1.4.2; 4.4.2; - 2.4.6; 3.4.1; 3.4.2; 4.4.3]. 1; [4.I.3; 5.I.2; 6.I.1; 6.I.2]. identify sources and access information [1.4.2; 1.4.3; 1.4.4; 1.4.5]; 3.4.1; [ML - 4.4.2]. RE - 4.4.6. WP - 5.4.1. WL - 4.I.2; [4.I.4; I.4]; 9.I.2; [9.I.3]. technical sources and communicate [4.2]. LM - 1.4.3. RE - 4.4.6. - 5.4.1]. [WL - 5.I.1]. WR - 1.4.1; 2.4.3; 2.4.4; 6.4.2; [6.4.4].</p>	<ol style="list-style-type: none"> Ask questions and use technology resources to solve problems. [AR - 4.8.4; 5.8.2; 6.8.1; 6.8.3]. LM - [1.8.2]; 4.8.3. [MA - 1.8.5]. RE - 4.8.3. SC - 1.8.1; 1.8.4; [2.8.6; 3.8.1; 3.8.4]. WP - 5.8.1; 5.8.2; [5.8.3]. [WL - 1.I.3; 1.II.3; 1.II.4; 2.II.1; 4.II.1; 4.II.3]. Use various technologies and develop strategies to assess the quality of sources and information. HE - [1.8.2; 1.8.3; 1.8.4; 1.8.5]; 5.8.6. LM - [1.8.2]; 1.8.4; 4.8.3. ML - 4.8.2. RE - 4.8.7. [SS - 1.8.1; 1.8.2]. WP - [3.8.2]; 5.8.1; 5.8.2. WL - [4.II.4; 5.II.1; 6.II.2]; 9.II.2. Organize information from technical sources and communicate findings. [AR - 5.8.5; 6.8.1]. [HE - 1.8.2; 1.8.5]. [LM - 1.8.5]. RE - 4.8.2; 4.8.4. [SC - 2.8.3; 3.8.3; 4.8.1; 4.8.2; 4.8.5; 4.8.6; 6.8.1]. WP - 2.8.5; [3.8.1; 3.8.2]; 5.8.1; 5.8.2. WR - 1.8.1; 1.8.2; 1.8.3; 1.8.4; 2.8.1; 2.8.2; 2.8.3; 2.8.4; 6.8.2; 6.8.4. 	
<p>to develop personal understanding. 4; 1.4.5; 4.4.3]. LM - 4.4.1. - 4.I.3; 6.I.1; 8.I.1; 9.I.2]. WR - 6.4.3. various technologies. [AR - 3.4.1 - 1. [RE - 1.4.3]. [SL - 2.4.4].</p> <p>logies to investigate a problem within a 3; 1.4.4; 1.4.5]. LM 4.4.1. RE - 4.4.2. 5; 4.4.4; 5.4.4]. WP - [5.4.1; 5.4.3]. lling and technologies to solve a prob- 3; 1.4.4; 1.4.5]. LM - 4.4.1. . [WP - 5.4.3]. WR - 6.4.3.</p>	<ol style="list-style-type: none"> Analyze and apply existing information to generate personal understanding. [AR - 5.8.6; 6.8.2; 6.8.4]. [HE - 1.8.2; 1.8.3; 1.8.4; 1.8.5; 4.8.3; 5.8.6]. LM - 4.8.1. RE - 1.8.2. [SC - 1.8.6; 2.8.5]. WP - [3.8.4]; 5.8.1; 5.8.2. [WL - 2.II.3; 3.II.1; 3.II.4; 4.II.2; 4.II.4; 5.II.2; 6.II.1; 7.II.1; 7.II.2; 7.II.3; 7.II.4; 8.II.1; 9.II.2]. WR - 6.8.3. Create a collection of original work using various technologies. [AR - 3.8.1; 4.8.4]. [HE - 5.8.5]. LM - 4.8.1. ML - 3.8.1. [RE - 1.8.3]. WP - [3.8.8; 3.8.4]; 5.8.1. WR - 6.8.3. Apply a variety of technologies to investigate a problem across content areas. [HE - 1.8.3; 1.8.4; 1.8.5]. LM - 4.8.1. RE - 4.8.2. [SC - 5.8.3]. WP - [3.8.4]; 5.8.1; [5.8.3]. [WL - 5.II.1]. WR - 6.8.3. Apply personal understanding and technologies to develop an invention or original solution to an authentic problem. AR - 3.8.1. LM - 4.8.1. RE - 4.8.3. [SC - 5.8.3]. WP - [3.8.4]; 5.8.1; 5.8.2; [5.8.3]. WR - 6.8.3. 	

“**overlaps in the standards. With “explicit” overlaps, a teacher will naturally cover both standards. With “implicit” (in**

3. Evaluate the present and future impacts of technology on society, economy and the environment. [AR - 6.12.4]. [LM - 2.12.3].
SC - [5.12.1]; 5.12.3; 6.12.1; 6.12.2. SS - 2.12.7; 5.12.6. WP - [4.12.1]; 4.12.3; [5.12.4].

1. Ask questions and use technology resources for self-directed learning and problem-solving. [AR - 5.12.1; 5.12.2; 5.12.6; 6.12.4]. [HE - 4.12.3; 5.12.1]. LM - 1.12.2; 4.12.3. [MA - 1.12.5]. RE - 4.12.1; 4.12.3. SC - 1.12.1; [2.12.4; 2.12.5; 3.12.4]. WP - 3.12.1; 3.12.2; 5.12.1; [5.12.3]. [WL - 4.III.1; 5.III.1; 5.III.2; 6.III.1; 6.III.2; 8.III.1; 9.III.3].
2. Evaluate the accuracy, relevance, appropriateness, comprehensiveness and bias of electronic information. HE - [1.12.3; 1.12.4]; 5.12.6. LM - 1.12.4; 4.12.3. ML - 4.12.1. RE - 4.12.2; 4.12.7. [SC - 1.12.3]. [SS - 1.12.1; 1.12.2]. WP - [3.12.1]; 3.12.4; 5.12.3.
3. Organize and analyze information from technical sources and communicate findings. [HE - 1.12.5]. [LM - 1.12.5]. RE - 4.12.4. [SC - 2.12.3; 2.12.6; 4.12.2; 4.12.5; 4.12.6]. WP - [3.12.1]; 3.12.2; 3.12.4; 5.12.1; 5.12.3. WL - 3.III.4. WR - 1.12.1; 1.12.2; 1.12.3; 1.12.4; 2.12.1; 2.12.2; 2.12.3; 2.12.4; 2.12.5; 6.12.2; [6.12.4].

1. Analyze and evaluate existing information to generate personal understanding. [AR - 4.12.1; 5.12.2; 6.12.4]. [HE - 1.12.1; 1.12.3; 1.12.4; 4.12.3; 5.12.3; 5.12.4; 5.12.5]. LM - 4.12.1. RE - 1.12.2. SC - [4.12.1; 4.12.4]; 6.12.2. WP - 3.12.1; 3.12.2; 4.12.3. [WL - 2.III.3; 3.III.1; 4.III.1; 4.III.3; 4.III.4; 5.III.2; 6.III.1; 6.III.2; 8.III.1; 9.III.3]. WR - 6.12.3.
2. Create a portfolio of original work using various technologies. [AR - 2.12.2 (VA), 3.12.1]. LM - 4.12.1. ML - 3.12.1 [RE - 1.12.3]. [SL - 2.12.4]. WP - 3.12.1; 3.12.2; [5.12.2]. WR - 3.12.1.
3. Evaluate and apply a variety of technologies to investigate complex problems in multidisciplinary contexts. [AR - 6.12.2]. LM - 4.12.1. RE - 4.12.3. WP - [3.12.1]; 3.12.2. WR - 6.12.3.
4. Apply and evaluate personal understanding to develop an invention or innovative solution to an authentic problem. AR - 3.12.1. LM 4.12.1. RE - 4.12.4. [SC - 3.12.5; 5.12.4]. WP - 3.12.1; 3.12.2; [4.12.1]; 4.12.3; [5.12.2; 5.12.3]. WR - 6.12.3.

LEGEND:

Content Code:

This chart illustrates the “explicit” and “implicit” overlaps
standards with minor adjustments.

User Code:

AR - Arts (dark pink)

HE - Health Enhanc

ML - Media Literacy (blue)

RE - Reading (blue)

TE - Technology (purple)

WP - Workplace C

TE 1.4.2 = Technology, Standard 1, Grade 4, Benchm



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t” overlaps in the standards. With “explicit” overlaps, a teacher will naturally cover both standards. With “implicit” (in

alh Enhancement (black)

ading (blue)

orkplace Competencies (yellow)

4, Benchmark 2

LM - Library Media (pink)

SC - Science (red)

WL - World Languages (lilac)

LT - Literature (blue)

SS - Social Studies (gold)

WR - Writing (blue)

endent

on

mplicit" (in brackets ex: [RE - 1.4.2]) a teacher could easily teach both

MA - Math (green)

(old) SL - Speaking and Listening (blue)

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